CLAIM AMENDMENTS

Listing of Claims:

What is claimed, is

1. (currently amended) A service providing device for providing a service for a user in which the service providing device provides service information for the user by means of a plurality of physical devices available to the user, the service providing device comprising:

an interface portion connected with a user and a physical device management portion which manages the information related to the user and the information related to the physical devices available to the user;

a monitoring portion for obtaining the information of the managed physical devices and/or of the users via said interface portion;

a negotiating portion communicating with a service provider and selecting one service type from the service types of the services provided by the service provider;

a service processing portion communicating with the service provider and transferring the service information of the service type to be interchanged between the user and the service provider;

a service information redistributing portion for receiving the service information supplied by the service provider to the user and transferred by said service processing portion, and for distributing the service information to the corresponding physical device and/or the combination of the physical devices based on the capabilities of the physical devices needed by the selected service type;

a controlling portion for controlling the operation of transferring information among the above-mentioned portions.

2. (currently amended) The service providing device according to claim 1, ~~characterized in that~~ wherein:

said negotiating portion is configured to determine a service type for the user, based on the available physical service information obtained from the monitoring portion and the information of the physical devices capability requirement of each of the service types provided by the service provider.

3. (currently amended) The service providing device according to claim 2, ~~characterized in that~~ wherein:

said negotiating portion is configured to further determine the service type for the user based on the user favorite information included in the user information.

4. (currently amended) The service providing device according to claim 3, ~~characterized in that~~ wherein:

said service information redistributing portion is configured to further determine for the user the physical device and/or the combination of the physical devices used for accepting the service, based on the user favorite information included in the user information.

5. (currently amended) The service providing device according to claim 2, ~~characterized in that~~ wherein:

said monitoring portion is configured to monitor whether the available physical device and the available physical device information and the user information managed by the user management portion have changed; and

when the change affects the current service provision, the monitoring portion notifies the negotiating portion to determine a new service type, or notifies the service information redistributing portion that it is needed to use the replacing physical device/combination of physical devices,

said negotiating portion determines a new service type for user based on the current available physical service information, in response to the notification of determining the new

service type, said service information redistributing portion determines a new physical device/combination of physical devices based on the physical device capability required by the new service type, and continues to distribute the service information to the corresponding physical device/combination of physical devices;

in response to the notice of using the replacing physical device, said service information redistributing portion selects a replacing physical device and continues to distribute the service information to the corresponding physical devices.

6. (currently amended) The service providing device according to claim 2, ~~characterized in that~~ wherein:

said service information redistributing portion controls the synchronization of the physical devices accepting the service.

7. (currently amended) A service providing method for providing services for a user, wherein the service providing method provides service for the user by means of a plurality of physical devices available to the user, the service providing method comprising:

receiving a service request sent from a user to a service provider via a physical device, or receiving a request for providing a service to a user from a service provider;

obtaining the information related to the user and the information related to the physical devices available to the user;

selecting one service type from the service types of the services that can be provided by the service provider;

distributing the service information, sent from the service provider to the user, to the corresponding physical device and/or the combination of physical devices based on the physical devices capability needed by the service type.

8. (currently amended) The service providing method according to claim 7, ~~characterized in that~~ wherein:

said step of selecting a service type comprises determining a service type for the user, based on the available physical service information and the information of the physical devices

capability requirement of each of the service types provided by the service provider.

9. (currently amended) The service providing method according to claim 8, ~~characterized in that~~ wherein:

said step of selecting a service type comprises further determining a service type for the user based on the user favorite information included in the user information.

10. (currently amended) The service providing method according to claim 9, ~~characterized in that~~ wherein:

said service information redistributing step comprises further determining the physical device(s) to accept the service for the user, based on the user favorite information included in the user information.

11. (currently amended) The service providing method according to claim 8, ~~characterized in that~~ wherein:

monitoring whether the available physical service information and the user information have changed; and

when the change affects the current service provision, determining a new service type for the user or using the replacing physical device/the combination of physical devices,

wherein said step of determining a new service type includes determining a new service type for the user based on the new available physical device information, and continuing to distribute the service information to the corresponding physical device/the combination of physical devices based on the physical device capabilities of said new service type;

said step of using the replacing physical devices includes selecting the corresponding physical device/the combination of the physical devices and continuing to distribute the service information to the corresponding physical device/the combination of the physical devices.

12. (currently amended) The service providing method according to claim 7, ~~characterized in that~~ wherein:

when the device to accept the service is a combination of the physical devices, controlling

the synchronization among the physical devices of the combination of the physical devices.

13. (currently amended) A sentient network generating method, the sentient network including ~~a~~ at least one user object and ~~one or more~~ at least one device ~~objects~~ object available to ~~the~~ said at least one user object, said sentient network generating method comprising:

receiving ~~the~~ a registration request from at least one user and building said at least one user object ~~object(s)~~ for said at least one user ~~the user(s)~~;

receiving the registration request from at least one device and building ~~the~~ at least one device ~~object(s)~~ object for at least one device ~~the device(s)~~;

associating a user object with said at least one of the device object ~~objects~~ to form ~~a~~ the sentient network.

14. (currently amended) The sentient network generating method according to claim 13, ~~characterized in that~~ wherein:

said at least one user object includes at least one of: ~~the~~ personal device identification information, ~~the~~ physiological characteristics information and ~~the~~ social connections information of the user,

said at least one device object includes at least: ~~the~~ basic information of ~~the~~ said at least one device, ~~the~~ on line status information of ~~the~~ said at least one device and ~~the~~ access interface information of ~~the~~ said at least one device, the basic information of said device including ~~the~~ identification information of ~~the~~ said at least one device and/or ~~the~~ capability information of ~~the~~ said at least one device.

15. (currently amended) The sentient network generating method according to claim 14, ~~characterized in that~~ wherein:

said sentient network generating method further comprises collecting ~~the~~ static and/or dynamic environment information of a plurality of said at least one device ~~device(s)~~ and/or said at least one user ~~user(s)~~.

16. The sentient network generating method according to claim 14, ~~characterized in~~

further comprising executing an association ~~associating~~ operation based on at least one basis taken from a group of bases consisting of:

the personal device identification information of the user;

the social connections information of the user;

at least one of said personal device identification information, said physiological characteristics information and said social connections information of the user; and

the environment information.

17 - 19. (canceled)

20. The sentient network generating method according to claim 13 ~~any one of claims 13 through 19~~, ~~characterized in that~~ wherein:

said user object further includes the user favorite information and/or the user authorization information, and

further comprising executing an association ~~associating~~ based on ~~the~~ user favorite information and/or ~~the~~ user authorization information.

21. (currently amended) The sentient network generating method according to claim 13, ~~characterized in~~ further comprising executing associating operation based on the status information of the device object(s).

22. (currently amended) The sentient network generating method according claim 13, ~~characterized in~~ further comprising executing associating operation based on the changed user object(s) information or the changed device object(s) information.

23. (currently amended) The sentient network generating method according to claim 15, ~~characterized in~~ further comprising collecting the user information or the device information through a wireless sensor network in which said user information or said device information are broadcast via one agent device attached to a user or a device.

24. (currently amended) The sentient network generating method according to claim 23, ~~characterized in that:~~ wherein said agent device further receives the user information or device information broadcast from other agent devices.

25. (currently amended) The sentient network generating method according to claim 23, ~~characterized in that~~ wherein:

said wireless sensor network further collects the user information or the device information broadcast by a plurality of agent devices through an information collecting device;

said user registration step and said device registration step further receive respectively said user information or said device information collected by said information collecting device; and

said environment information collecting step further receives said user information or said device information collected by said information collecting device.

26. (currently amended) The sentient network generating method according to claim 23, ~~characterized in that~~ wherein:

one agent device in said wireless sensor network collects the user information or the device information broadcast by the other agent devices;

said user management step and said device management step receive the user information or the device information respectively from said agent device; and

said environment information collecting step further receives the user information or the device information from said agent device.

27. (currently amended) A sentient network generating device for carrying out the method of ~~any preceding~~ claim 13.

28. (currently amended) A service providing system, comprising a sentient network generating device and a service providing device built for each user, wherein the service providing device for each user provides service information for ~~the~~ said each user by utilizing at least one available physical devices determined by the sentient network generating device for the user,

said sentient network generating device comprising:

a user management portion for receiving the registration request from at least one user, and for storing the user information;

a physical device management portion for receiving the registration request from at least one device, and for storing the device information;

an associating portion for associating a user with at least one of said devices to generate a sentient network;

the service providing device for each user comprising:

an interface portion connected to the sentient network generating device and used for receiving or transmitting the information from/to said sentient network generating device ;

a monitoring portion for obtaining from the sentient network, via the interface portion, the physical device information associated by the sentient network generating device for the user;

a negotiating portion communicating with a service provider and selecting one service type from the service types of the services provided by the service provider;

a service processing portion communicating with the service provider and transferring the service information of the service type to be interchanged between the user and the service provider;

a service information redistributing portion for receiving the service information supplied by the service provider to the user and transferred by said service processing portion, and for distributing the service information to the corresponding physical device and/or the combination of the physical devices based on the capabilities of the physical devices needed by the selected service type; and

a controlling portion for controlling the operation of transferring information among the above-mentioned portions.

29. (currently amended) A service providing method for providing services for ~~a~~ at least one user, comprising a sentient network generating step and a step of providing services for ~~the~~ said at least one user, wherein the service providing step provides service information for ~~the~~ said at least one user by utilizing at least one ~~of the~~ available physical ~~devices~~ device determined by the sentient network generating step for ~~the~~ said at least one user,

said sentient network generating step comprising:

a user management step for receiving ~~the~~ a registration request from at least one user from said at least one user and for storing ~~the~~ user information;

a physical device management step for receiving the registration request from said at least one physical device and for storing ~~the~~ physical device information;

an associating step for associating a user with at least one device of ~~the devices~~ said at least one device to generate a sentient network;

for each said at least one user, the service providing step comprising:

receiving a service request sent from ~~a~~ said at least one user to a service provider via a physical device, or receiving a request for providing a service from a service provider to ~~a~~ said at least one user;

obtaining the physical devices information associated by the sentient network generating step for ~~the~~ said at least one user;

selecting one service type from the service types of ~~the~~ services that can be provided by ~~the~~ service provider;

distributing the service information supplied by the service provider to the user to the corresponding associated physical device and/or the combination of physical devices based on the physical devices capability needed by the service type.